SEP 2 5 2009

Attachment 2

510k summary

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR Section 807.92. The assigned 510(k) number is:

A. General Information on submitter

1. Submitter's Name: SHANGHAI LITTLE

DOCTOR ELECTRONIC CO.,

LTD.

2. Address: NO. 8, TONGXING ROAD,

ECONOMIC AND TECHNOLOGICAL

DEVELOPMENT DISTRICT, NANTONG CITY, JIANGSU PROVINCE, 226007, CHINA

 3. Telephone:
 0086-513-8598 6718

 4. Contact Person:
 Mr. Janusun Wang

 5. Date Prepared:
 08/15/2009

 6. Registration Number:
 3005907323

 7. Owner Number of Registration:
 9086965

B. General information of modified device

1. Name: Digital wrist BP monitor

2. Trade Name: Digital wrist blood pressure

monitor, model LD 1143

3. Common Name: Electronic

Sphygmomanometer

4. Classification Name: System, measurement, blood

pressure, non-invasive

5. Product Code: DXN

6. *Class:*

7. Regulation Number: 870.1130

C. Identification of FDA Cleared Devices(predicate)

1. Name: Digital wrist blood pressure monitor, model LD 8

2. K Number: K070825

3. Date Cleared: May 25, 2007

D. Description of the Device

The Digital Wrist Blood Pressure Monitor, Model LD1143, is designed to measure the systolic and diastolic blood pressure and pulse rate of an individual adult by using a non-invasive technique in which an inflatable wrist cuff is wrapped around the wrist. The method to define systolic and diastolic pressure is similar to the auscultatory method but uses an electronic semiconductor sensor rather than a stethoscope and mercury manometer. The sensor converts tiny alterations in cuff pressure to electrical signals, by analyzing those signals to define the systolic and diastolic blood pressure and to calculate pulse rate, which is a well-known technique in the market called the "oscillometric method". The device can analyze the signals promptly and display the results. The modified device has two new auxiliary features called WHO indication and date and time display.

E. Intended Use Statement

LD1143 Fully Automatic Wrist Blood Pressure Monitor is intended for use by medical professionals in hospital or by patients for self monitoring at home to monitor and display diastolic, systolic blood pressure and pulse rate of adult, with the cuff around the wrist, which is same as predicate device.

F. Comparisons to the predicate

The modified device has the same intended use and identical fundamental scientific principle called oscillometric BP measurement method. It is identical in safety and effectiveness of the intended use to the 510(k) cleared device model LD8. The modifications to our original 510(k) cleared device include dimensional specifications and adding new auxiliary features of WHO and date and time indication. The software codes of the modified device remains unchanged. The fundamental scientific technology of the modified device remains the same as that of the 5l0(k) cleared device.

The modifications that were made are:

- 1. Appearance
- 2. WHO blood pressure classification indication
- Change into 90 sets of memory recalls from 30
- 4. Date and time display

5. Packaging and wording in instruction manual

Please find the following tabulated comparisons supporting that the modified device is substantially equivalent to the predicate device with FDA 510K# K070825

Technological Characteristics Comparisons table

Intended use	identical
Fundamental scientific principle	Identical
Target population	Identical
Use at home or in hospital	Identical
Safety and effectiveness	Identical
Over the counter	Identical
Performance specifications	Identical
Stirility	Not applicable
Biocompatibility	Identical
Mechanical safety	Identical
Electrical safety	Identical
Standards met	Identical
Energy used or delivered	Identical
Environmental specifications	Identical
Ergonomics of the patient-user	Identical
interface	·
Software	Similar
Packaging or labeling	Similar
Dimensional specification	Similar

G. Discussion of Similarities and Differences

The modified device is identical to the predicate in functionality and performance ,with the only differences being the additional features, such as WHO indication, date and time display and an increased measurement recall capacity to 90 sets of measurement. The modifications to our original 510(k) cleared device include the dimensional specifications, packaging and labeling and subprogram of software for WHO indication and date and time display. The blood pressure measurement algorithm and its software codes of the modified devices remains unchanged. The fundamental scientific technology of the

modified device remains the same as that of the 5l0(k) cleared device. These differences have no impact on safety or effectiveness of the device.

H. Performance testing

The subjects have been tested and found otherwise to comply with the following standards:

- * IEC/EN 60601-1, Medical electrical equipment Part 1: General requirements for basic safety and essential performance
- *IEC/EN/ANSI 60601-1-2, Medical Electrical Equipment Part 1-2: General requirements for safety Collateral standard: Electromagnetic compatibility Requirements and Test
- * ISO 10993-1, Biological Evaluation Of Medical Devices Part 1: Evaluation And Testing
- * ANSI/AAMI SP10-2002, Manual, Electronic or Automated Sphygmomanometers

The following testing was conducted:

- a. General Functions Test
- b. Reliability Test Operation Conditions
- c. Reliability Test Drop Testing
- d. Reliability Test Storage
- e. Reliability Test Vibration Testing
- f. EMC Testing
- g. IEC 60601-1 Safety Testing

None of the testing demonstrated any design characteristics that violated the requirement of the Reviewer Guidance or resulted in any safety hazards

I. Conclusions:

The LD1143 Digital Wrist Blood Pressure Monitor is as safe and effective as the predicate device in terms of intended use in blood pressure measurement, based on electrical, mechanical an environmental testing results, and SP-10 standard requirements. FDA Good Manufacturing Practices requirements were also met. Therefore, our modified device is as safe and effective as the predicate device.





Food and Drug Administration 10903 New Hampshire Avenue Document Control Room W-O66-0609 Silver Spring, MD 20993-0002

Shaghai Little Doctor Electronic Co., Ltd. c/o Mr. Janusun Wang Regulatory Affairs Representative Medical Device Division No. 8, Tongxing Road Nantong, Jiangsu 226007 CHINA

SEP 2 5 2009

Re: K092683

Trade/Device Name: Little Doctor Digital Wrist BP Monitor LD 1143

Regulatory Number: 21 CFR 870.1130

Regulation Name: Non-invasive Blood Pressure Measurement System

Regulatory Class: II (two)
Product Code: DXN
Dated: August 19, 2009
Received: September 1, 2009

Dear Mr. Wang:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the <u>Federal Register</u>.

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Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please go to http://www.fda.gov/AboutFDA/CentersOffices/CDRH/CDRHOffices/ucm115809.htm for the Center for Devices and Radiological Health's (CDRH's) Office of Compliance. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to

http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm for the CDRH's Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm.

Sincerely yours,

+6 Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

Attachment 1

Indications for use

510(k) Number (if known):
Device Name: Littledoctor Digital Wrist BP Monitor LD 1143
Indications for Use:
The subject is intended to be used for measuring blood
pressure(systolic and diastolic pressure) and pulse rate, for
adult, by oscillometric method, upon the upper arm and at home
or in hospital.
Prescription Use AND/OR Over-The-Counter UseX (Part 21 CFR 801 Subpart D) AND/OR (21 CFR 801 Subpart C)
(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE OF NEEDED)
Concurrence of CDRA, Office of Device Evaluation (ODE)
(Division Sign-Off) Division of Cardiovascular Devices Page of
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